

**REMARKS**

Applicant has amended claims 6 and 14 to correct informalities, amended claims 1 and 6 to more appropriately define the present invention, and added new claims 15 and 16 to protect additional aspects related to the present invention. Claims 1-16 are pending and under current examination.

**Regarding the Office Action:**

In the Office Action, the Examiner objected to claims 6 and 14 because of informalities; rejected claims 1, 4, and 6-8 under 35 U.S.C. § 102(b) as anticipated by Nam, et al. (U.S. Patent Application Publication No. 2002/0109217) ("Nam"); rejected claims 2, 3, and 12 under 35 U.S.C. § 103(a) as unpatentable over Nam in view of Sasaki, et al. (U.S. Patent No. 6,294,439) ("Sasaki"); rejected claims 5 and 14 under 35 U.S.C. § 103(a) as unpatentable over Nam in view of Bura (U.S. Patent No. 4,489,487) ("Bura"); rejected claim 9 under 35 U.S.C. 103(a) as unpatentable over Nam in view of Rogowski (U.S. Patent No. 5,684,707) ("Rogowski"); rejected claim 10 under 35 U.S.C. § 103(a) as unpatentable over Nam in view of Wojewnik, et al. (U.S. Patent No. 6,640,434) ("Wojewnik") or Varaprasad, et al. (U.S. Patent No. 5,910,854) ("Varaprasad"); rejected claim 11 under 35 U.S.C. § 103(a) as unpatentable over Nam in view of either Wojewnik or Varaprasad as applied to claim 10, and further in view of Rogowski; and rejected claim 13 under 35 U.S.C. § 103(a) as unpatentable over Nam in view of Sasaki as applied to claim 12, and further in view of Rogowski. Applicant traverses the objection and rejections for the following reasons.<sup>1</sup>

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<sup>1</sup> The Office Action contains statements characterizing the related art, case law, and the claims. Regardless of whether any such statements are specifically identified herein, Applicant declines to automatically subscribe to any statements in the Office Action.

**Regarding the Objection to Claims 6 and 14:**

Applicant has amended claims 6 and 14 to overcome the informalities pointed out by the Examiner, and respectfully requests that the objection to claims 6 and 14 be withdrawn.

**Rejection of Claims 1, 4, and 6-8 under 35 U.S.C. § 102(b):**

In order to properly establish that Nam anticipates Applicant's claimed invention under 35 U.S.C. § 102, each and every element of each of the claims in issue must be found, either expressly described or under principles of inherency, in that single reference. Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the ... claim." See M.P.E.P. § 2131, quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989).

Nam does not disclose each and every element of Applicant's claimed invention, despite the Examiner's allegations. Independent claim 1, as amended, recites

...sectioning semiconductor elements from a semiconductor wafer to provide at least first and second semiconductor elements, ... adhering the first semiconductor element to the semiconductor device forming base material by the element adhesive film; and adhering the second semiconductor element on the first semiconductor element by the element adhesive film.

Similarly, independent claim 6, as amended, recites "an element adhesion section for adhering the first semiconductor element to the semiconductor device forming base material by the element adhesive film and adhering the second semiconductor element on the first semiconductor element by the element adhesive film."

In contrast to the claimed invention, Nam teaches a first semiconductor chip 64 and a second semiconductor chip 72 bonded on lead frame 60. See Nam, Fig. 4 and corresponding description. However, the first semiconductor chip 64 is bonded directly on lead frame 60, and

second semiconductor chip 72 is bonded to die pad 66 through adhesive tape 68. Thus, the use of adhesive tape 68 in Nam does not constitute “adhering the second semiconductor element on the first semiconductor element by the element adhesive film,” as recited in claim 1, nor does it constitute “adhering the first semiconductor element to the semiconductor device forming base material by the element adhesive film and adhering the second semiconductor element on the first semiconductor element by the element adhesive film,” as recited in claim 6.

Furthermore, Nam teaches that “[a]fter adhesive tape 68 is placed on die pad 66 of lead frame 60, step 35 attaches second chip 72 to die pad 66 through adhesive tape 68. A die pick-up tool 54 picks up second chip 72 from a chip provider, such as a wafer table 56, and places second chip 72 on adhesive tape 68.” Nam, par. [0030]. The adhesive tape is placed on the die pad of the lead frame, in advance, before movement of the semiconductor chips. Therefore, Nam never moves the semiconductor chip once it is stuck to the adhesive tape, and therefore cannot teach Applicant’s claimed

...sticking an element adhesive film, which is sectioned according to the shape of the semiconductor element, to each of the back surfaces of the picked-up first and second semiconductor elements in order of their sectioning; sending the first and second semiconductor elements stuck to the element adhesive film above a semiconductor device forming base material in order of their sectioning... (claim 1).

Likewise, Nam can not teach Applicant’s claimed “moving section for moving the first and second semiconductor elements stuck the element adhesive films above a semiconductor device forming base material in order of their sectioning...” (claim 6).

As such, Nam does not disclose each and every element of independent claims 1 and 6. Nam therefore does not anticipate Applicant’s claims 1, 4, and 6-8, and the Examiner has not

met these essential requirements of anticipation for a proper 35 U.S.C. § 102(b) rejection.

Independent claims 1 and 6 are allowable, for at least the reasons set forth above, and dependent claims 4, 7, and 8 are also allowable at least by virtue of their respective dependence from allowable base claims 1 and 6. Therefore, the improper 35 U.S.C. § 102(b) rejection of claims 1, 4, and 6-8 should be withdrawn.

**Regarding the Rejection of Claims 2, 3, and 12 under 35 U.S.C. § 103(a):**

Applicant respectfully traverses the rejection of claims 2, 3, and 12 under 35 U.S.C. § 103(a) as unpatentable over Nam in view of Sasaki. Applicant disagrees with the Examiner's arguments and conclusions. A *prima facie* case of obviousness has not been established.

"To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)." M.P.E.P. § 2142, 8th Ed., Rev. 2 (May 2004), p. 2100-128.

A *prima facie* case of obviousness has not been established because, among other things, neither Nam or Sasaki, nor their combination, teaches or suggests each and every feature of Applicant's claims. Dependent claim 4 includes everything recited in the base claim. See M.P.E.P. § 608.01(n)(III). Applicant has already demonstrated previously herein that Nam does not teach or suggest all the elements of Applicant's independent claims 1 and 6.

The Examiner cited Sasaki to allege that “it is conventional to adhere a first holding member to the front of a semiconductor wafer... [and that it] would have been obvious to one of ordinary skill in the art ... to add the conventional steps of Sasaki et al. into the method of Nam et al...” (Office Action, p. 3). This still does not cure Nam’s deficiencies, however, as applied to Applicant’s independent claims 1 and 6. That is, Sasaki does not teach “an element adhesion section for adhering the first semiconductor element to the semiconductor device forming base material by the element adhesive film and adhering the second semiconductor element on the first semiconductor element by the element adhesive film,” as recited in claims 1 and 6.

The Examiner has therefore not met at least one of the essential criteria for establishing a *prima facie* case of obviousness. The Examiner’s citation of Nam and Sasaki against Applicant’s claims 2, 3 and 12 is not sufficient for the Examiner to establish *prima facie* obviousness. Thus, dependent claims 2, 3, and 12 are allowable for the reasons presented herein, and at least by virtue of their respective dependence from allowable base claims 1 and 6. Therefore, the improper 35 U.S.C. § 103(a) rejection of claims 2, 3, and 12 should be withdrawn.

**Rejection of Claims 5 and 14 under 35 U.S.C. § 103(a):**

Applicant respectfully traverses the rejection of claims 5 and 14 under 35 U.S.C. § 103(a) as unpatentable over Nam in view of Bura. Applicant disagrees with the Examiner’s arguments and conclusions. A *prima facie* case of obviousness has not been established.

Applicant has already demonstrated previously herein that Nam does not teach or suggest all the elements of Applicant’s independent claims 1 and 6. The Examiner cited Bura to allegedly cure Nam’s deficiency pertaining to dependent claims 5 and 14 only, as Nam does not teach or suggest “applying the tape to the back of the semiconductor element using the porous

adsorption member” (Office Action, p. 3). Nevertheless, Bura does not cure Nam’s deficiencies as applied to Applicant’s independent claims 1 and 6, as discussed above.

The Examiner has therefore not met at least one of the essential criteria for establishing a *prima facie* case of obviousness. The Examiner’s citation of Nam and Bura against Applicant’s claims 5 and 14 is not sufficient for the Examiner to establish *prima facie* obviousness. Thus, dependent claims 5 and 14 are allowable for the reasons presented herein, and at least by virtue of their respective dependence from allowable base claims 1 and 6. Therefore, the improper 35 U.S.C. § 103(a) rejection of claims 5 and 14 should be withdrawn.

**Rejection of Claim 9 under 35 U.S.C. § 103(a):**

Applicant respectfully traverses the rejection of claim 9 under 35 U.S.C. § 103(a) as unaparentable over Nam in view of Rogowski. Applicant disagrees with the Examiner’s arguments and conclusions. A *prima facie* case of obviousness has not been established.

Applicant has already demonstrated previously herein that Nam does not teach or suggest all the elements of Applicant’s independent claims 1 and 6. The Examiner cited Rogowski to allegedly cure Nam’s deficiency pertaining to dependent claim 9 only, as Nam does not teach or suggest “the adsorption member to be made of a porous metal” (Office Action, p. 4).

Nevertheless, Rogowski does not cure Nam’s deficiencies as applied to Applicant’s independent claims 1 and 6, as discussed above.

The Examiner has therefore not met at least one of the essential criteria for establishing a *prima facie* case of obviousness. The Examiner’s citation of Nam and Rogowski against Applicant’s claim 9 is not sufficient for the Examiner to establish *prima facie* obviousness. Thus, dependent claim 9 is allowable for the reasons presented herein, and at least by virtue of its

dependence from allowable base claim 6. Therefore, the improper 35 U.S.C. § 103(a) rejection of claim 9 should be withdrawn.

**Rejection of Claim 10 under 35 U.S.C. § 103(a):**

Applicant respectfully traverses the rejection of claim 10 under 35 U.S.C. § 103(a) as unpatentable over Nam in view of Wojewnik or Varaprasad. Applicant disagrees with the Examiner's arguments and conclusions. A *prima facie* case of obviousness has not been established.

Applicant has already demonstrated previously herein that Nam does not teach or suggest all the elements of Applicant's independent claims 1 and 6. The Examiner cited Wojewnik or Varaprasad to allegedly cure Nam's deficiency pertaining to dependent claim 10 only, as Nam does not teach or suggest "the cutting means to be a laser" (Office Action, p. 5). Nevertheless, Wojewnik or Varaprasad do not cure Nam's deficiencies as applied to Applicant's independent claims 1 and 6, as discussed above.

The Examiner has therefore not met at least one of the essential criteria for establishing a *prima facie* case of obviousness. The Examiner's citation of Nam and Wojewnik or Varaprasad against Applicant's claim 10 is not sufficient for the Examiner to establish *prima facie* obviousness. Thus, dependent claim 10 is allowable for the reasons presented herein, and at least by virtue of its dependence from allowable base claim 6. Therefore, the improper 35 U.S.C. § 103(a) rejection of claim 10 should be withdrawn.

**Rejection of Claim 11 under 35 U.S.C. § 103(a):**

Applicant respectfully traverses the rejection of claim 11 under 35 U.S.C. § 103(a) as unpatentable over Nam in view of either Wojewnik or Varaprasad as applied to claim 10, and

further in view of Rogowski. Applicant disagrees with the Examiner's arguments and conclusions. A *prima facie* case of obviousness has not been established.

Applicant has already demonstrated previously herein that Nam does not teach or suggest all the elements of Applicant's independent claims 1 and 6. The Examiner cited Wojewnik or Varaprasad as applied to claim 10, and Rogowski, to allegedly cure Nam's deficiency pertaining to dependent claim 11 only, as Nam does not teach or suggest "the adsorption member to be made of a porous metal" (Office Action, p. 5). Nevertheless, Wojewnik or Varaprasad and Rogowski do not cure Nam's deficiencies as applied to Applicant's independent claims 1 and 6, as discussed above.

The Examiner has therefore not met at least one of the essential criteria for establishing a *prima facie* case of obviousness. The Examiner's citation of Nam and Wojewnik or Varaprasad as applied to claim 10, and further in view of Rogowski, against Applicant's claim 11 is not sufficient for the Examiner to establish *prima facie* obviousness. Thus, dependent claim 11 is allowable for the reasons presented herein, and at least by virtue of its dependence from allowable base claim 6. Therefore, the improper 35 U.S.C. § 103(a) rejection of claim 11 should be withdrawn.

**Rejection of Claim 13 under 35 U.S.C. § 103(a):**

Applicant respectfully traverses the rejection of claim 13 under 35 U.S.C. § 103(a) as unpatentable over Nam in view of Sasaki as applied to claim 12, and further in view of Rogowski. Applicant disagrees with the Examiner's arguments and conclusions. A *prima facie* case of obviousness has not been established.

Applicant has already demonstrated previously herein that Nam does not teach or suggest all the elements of Applicant's independent claims 1 and 6. The Examiner cited Sasaki as



applied to claim 12, and Rogowski, to allegedly cure Nam's deficiency pertaining to dependent claim 13 only, as Nam does not teach or suggest "the adsorption collet to be made of a porous metal" (Office Action, p. 6). Nevertheless, Sasaki does not cure Nam's deficiencies as applied to Applicant's independent claims 1 and 6, as discussed above.

The Examiner has therefore not met at least one of the essential criteria for establishing a *prima facie* case of obviousness. The Examiner's citation of Nam and Sasaki as applied to claim 12, and further in view of Rogowski, against Applicant's claim 13 is not sufficient for the Examiner to establish *prima facie* obviousness. Thus, dependent claim 13 is allowable for the reasons presented herein, and at least by virtue of its dependence from allowable base claim 6. Therefore, the improper 35 U.S.C. § 103(a) rejection of claim 13 should be withdrawn.

**Conclusion:**

In view of the foregoing, Applicant requests reconsideration of the application and withdrawal of the objection and rejections. Pending claims 1-16 are in condition for allowance, and Applicant requests a favorable action.

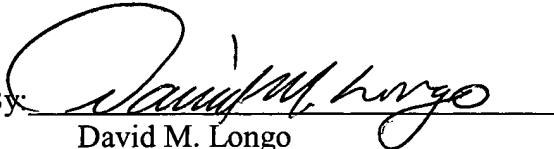
Should the Examiner continue to dispute the patentability of the claims after consideration of this Amendment, Applicant encourages the Examiner to contact the undersigned representative by telephone to discuss any remaining issues or to resolve any misunderstandings.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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